

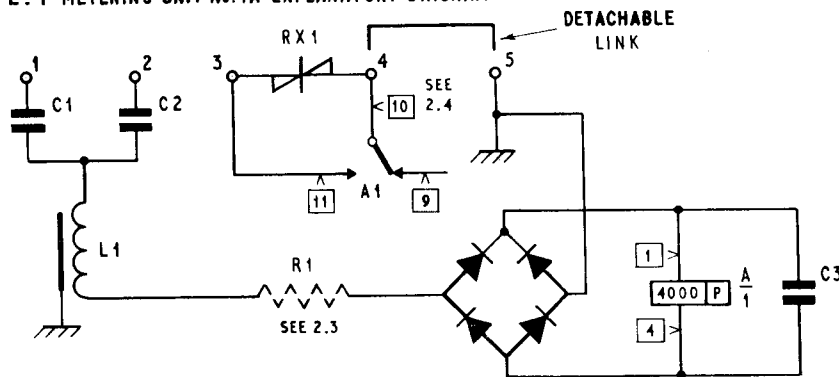
S.T.D. METERING AT P.M.B.X's MISCELLANEOUS APPARATUS

1. S.T.D. METERING SCHEMES AVAILABLE

SCHEME	FACILITIES PROVIDED
A	Totals metering on Exchange Lines
B	Trip metering, i.e. Trip Meter and Metering Unit permanently associated with an Exchange Line
C	Switched trip metering, the Trip Meter to be switched into use as under scheme 'C1' (a) or (b) or scheme 'C2'
C1	(a) Metering Unit, with Trip Meter permanently associated can be switched to line required (b) Subscribers private meter (Meter No.19) can be switched to line required
C2	Trip Meter which can be switched to one of a group of Metering Units permanently connected to Exchange Lines
D1	Combination of schemes 'A' & 'B' giving total and trip metering
D2	Combination of schemes 'A' & 'C2' giving total and switched trip metering
E	Metering at switchboard extension
F	Cord Circuit Trip Metering

2. METERING UNIT No.1A

2.1 METERING UNIT No.1A EXPLANATORY DIAGRAM



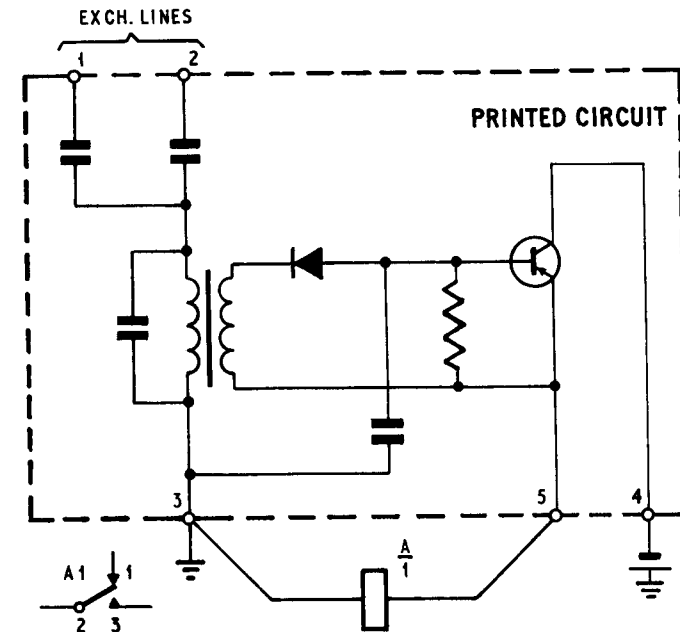
2.2 METERING UNIT No.1A is obsolete and is superseded by METERING UNITS No.3...

2.3 RESISTOR R1 is set up during manufacture

2.4 Plug in RELAY, T.M.C. TYPE, 6U1

3. METERING UNIT No.3...

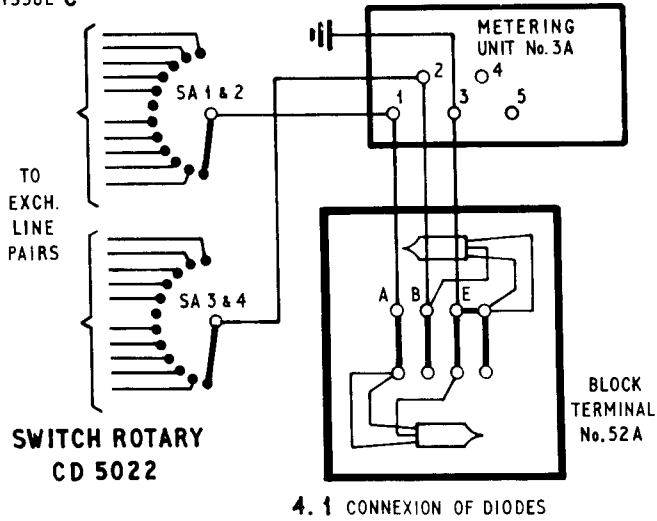
3.1 METERING UNIT No.3... EXPLANATORY DIAGRAM



3.2 METERING UNIT No.3... supersedes METERING UNIT No.1A

CIRCULATION GENERAL	Post Office Telecomms. Headquarters TD 2.4.1 Paper W		
	ISSUE		
	C	Section 4 added, Minor Amendments	MCH 28-10-70
	B	New Format	P.F.C. 19-8-68
		E. C. STEVENS TD 2.4.1	21-12-59

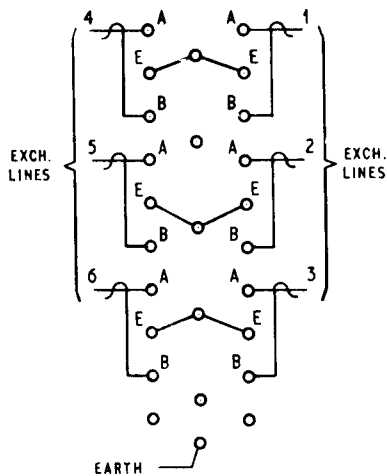
4. PREVENTION OF FALSE OPERATION OF METERING UNIT No. 3A



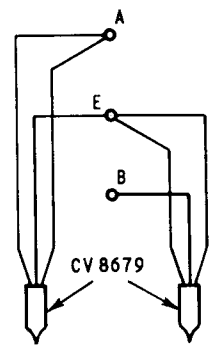
4.1 CONNEXION OF DIODES

4.2 WHEN SCHEME 'C1a' ALONE IS REQUIRED ONLY TWO DIODES CV8679 SHOULD BE USED. THEY SHOULD BE WIRED ACROSS THE METERING UNIT No. 3A AS SHOWN USING A BLOCK TERMINAL No. 52A (NOTE 4.8.2) THE TWO DIODES TO BE MOUNTED AND WIRED INSIDE TERMINAL BLOCK AND POSITIONED ONE EACH SIDE OF THE TERMINALS THE TERMINAL BLOCK TO BE SCREWED TO THE WALL BESIDE THE METERING UNIT IF POSSIBLE OTHERWISE IN ANY CONVENIENT POSITION

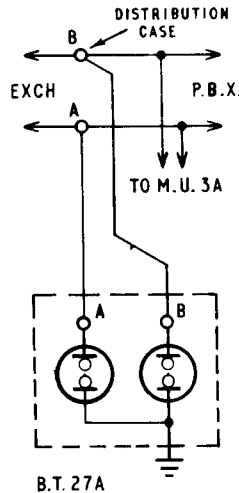
4.3 The following modifications for prevention to be carried out at other installations where a METERING UNIT No. 3A is fitted



4.4 CONNEXION OF EXCHANGE LINES

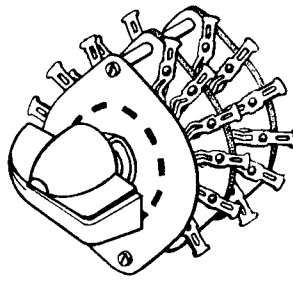


4.5 CONNEXION OF DIODES TO B.T. 27A (EACH EXCHANGE LINE CONNECTED SIMILARLY)

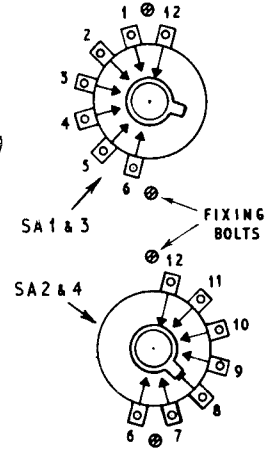


4.6 SCHEMATIC DIAGRAM

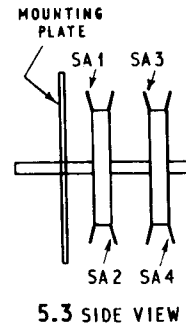
5. ROTARY SWITCH



5.1 PERSPECTIVE VIEW



5.2 REAR VIEWS



5.3 SIDE VIEW

5.4 TYPICAL CONNEXIONS

CONNEXION	TAG	BANK	SWITCH INDICATION ON LABEL 359A
EXCH. LINE 1	9	SA 2 & SA 4	1
	10	SA 2 & SA 4	2
EXCH. LINE 5	11	SA 2 & SA 4	3
	4	SA 1 & SA 3	4
EXCH. LINE SPARE	2	SA 1 & SA 3	5
	3	SA 1 & SA 3	•
EXCH. LINE 6	4	SA 1 & SA 3	6
	7	SA 1 & SA 3	7
EXCH. LINE 8	6	SA 1 & SA 3	8
	9	SA 2 & SA 4	9
EXCH. LINE 10	7	SA 2 SA 4	10
	8	SA 2 & SA 4	•
M.U.No..TERM. 1	12	SA 1 & SA 2	SEE 5.4.1
M.U.No..TERM. 2	12	SA 3 & SA 4	

5.4.1 TAG No.12. SA 1 & SA 2 are inherently strapped
TAG No.12. SA 3 & SA 4 are inherently strapped

4.7 STORES REQUIRED

ITEM	QUANTITY
VALVE ELECTRONIC CV 8679	2 PER EXCHANGE LINE
BLOCK TERMINAL No.27A	1 PER SIX EXCHANGE LINES
SLEEVING No.7B	AS REQUIRED
CABLE PVC No.3A	AS REQUIRED

4.8 WIRING AND INSTALLATION

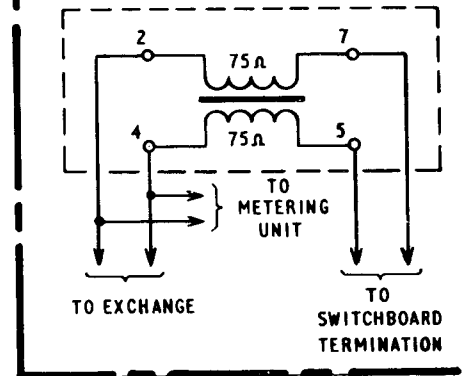
4.8.1 THE DIODES CV8679 TO BE SOLDERED TO THE TAGS IN THE BLOCK TERMINAL No.27A AS INDICATED IN 4.5 AND POSITIONED NEATLY BETWEEN THE TAG BLOCK AND THE BASE OF THE BLOCK TERMINAL No.27A. TO FACILITATE THIS OPERATION THE TAG BLOCK SHOULD BE REMOVED FROM THE BASE

4.8.2 THE LEAD OUT WIRES FROM DIODES CV8679 SHOULD BE INSULATED WITH SLEEVING No.7B; NO BENDS SHOULD BE MADE IN THE LEAD OUT WIRES WITHIN 1/8 INCH OF THE GLASS SEAL

4.8.3 THE SCREW TERMINALS OF THE BLOCK TERMINAL No.27A SHOULD BE CABLED TO THE EXCHANGE LINES AS INDICATED IN 4.5 CONNEXION TO THE EXCHANGE LINES SHOULD BE MADE AT THE DISTRIBUTION FRAME OR CONNEXION BOX WHERE THE INCOMING EXCHANGE LINES ARE TERMINATED

4.8.4 THE CENTRE (EARTH) STRIP OF THE BLOCK TERMINAL No.27A SHOULD BE CONNECTED TO EARTH AND STRAPS INSERTED TO THE EARTH TERMINALS AS INDICATED IN 4.4

6. USE OF INDUCTOR COIL No.172A AS A LONGITUDINAL CHOKE IN EXCHANGE LINES



4.8.5 MARKING

THE INSIDE LID OF THE BLOCK TERMINAL No.27A SHOULD BE SIGNWRITTEN, SHOWING THE EXCHANGE LINE NUMBERS TO WHICH THE TERMINAL BLOCK IS CONNECTED